

SV 1, 2; 3 1971, 1972, 1973 C.

Spontaneous lymphatic leukaemia in Wistar rat. Neoplasma
(Bratisl.) 12 no.1:15-20 '65

1. Oncological Research Institute, Bratislava, Czechoslovakia.

HLAVAY, E.

6623. Erythro-leukaemia in the rat caused by cell-free filtrate of carcinoma. F. Svec, E. Hlavay, V. Theroz, and P. Kocner. *Acta haemat., Basel*, 1957, 17, 33-41 (Abt. f. exp. Krebsforsch., Onkolog. Inst. zu Bratislava, Czechoslovakia).--Subcut. injection of cell-free filtrates of BS tumour in young rats produced a typical leukaemia with involvement of the erythropoietic system in 20% of the animals after a latent period of 6-8 months. (German)
G. W. Caspersen

Hlavayova, E.
SVEC, Frantisek; HLAVAYOVA, Elena

The problem of leukemia in childhood; a contribution. Neoplasma,
Bratisl. 5 no.2:119-122 1958.

1. Oncological Research Institute Bratislava. Authors' address; Dr.
F. Svec, Dr. E. Hlavayova, Bratislava, Cs. army 17.
(LEUKEMIA, experimental,
in young rats)

111711V71180001
SVEJDA, Jaroslav; KOSSEY, Peter; HLAVAYOVA, Elena; SVEC, Frantisek

Histological picture of the transplantable rat leukaemia induced by X-irradiation and methylcholanthrene. Neoplasma, Bratisl. 5 no.2: 123-131 1958.

1. Oncological Research Institute, Bratislava Patho-Anatomical Institute, Faculty of Medicine, Masaryk University, Brno. Authors' address: Dr. J. Svejda, Brno, Pekarska 53; Dr. P. Kossey, Dr. Hlavayova, Dr. F. Svec, Bratislava, ul. Cs. armady 17.

(LEUKEMIA, EXPERIMENTAL,
methylcholanthrene & x-ray induced in rats)
(METHYLCHOLANTHRENE, effects,
exper. leukemia in rats)
(ROENTGEN RAYS, effects,
same)

HLAVAYOVA, E.

Toxication of myleran in rats by the homologous bone marrow.
Neoplasma, Bratisl. 7 no.1 suppl:137-141 '60.

(BONE MARROW transpl)
(BUSULFAN toxicol)

HLAVAYOVA, E.; KOSSEY, P.; SMIDA, J.; SVEC, F.

Further experiments with a leukaemogenic inducer present in ES tumour.
Neoplasma 9 no.5:457-463 '62.

1. Oncological Research Institute, Bratislava, CSSR.
(NEOPLASMS, EXPERIMENTAL) (LEUKEMIA, EXPERIMENTAL)

BRATISLAVA

F. SVETC, L. HLAVAYOVA and V. DITTERTOVA, Oncology Research Institute (Vyskumny ustav onkologicky) Chief (reditel) Docent Dr V. THURZO, and Department of Pharmacodynamics, Chemistry Institute of the Slovak Academy of Sciences, Czechoslovak Academy of Sciences (Oddelenie farmakodynamiky Chemickeho ustavu SAV - CSAV) Head (prednosta) F. SELECKY MSc, Bratislava.

"Pharmacology and Toxicology of 6-Azauracil Riboside."

Prague, Casopis Lekaru Ceskych, Vol 102, No 19, 10 May 63; pp 505-511.

Abstract [English summary modified] : Comprehensive studies in rats, rabbits and cats: urinary levels after 0.1 and 1 Gm /Kg. i.v. in healthy and hepatitic rats confirm that compound is degraded by liver; 0.1 Gm /Kg. did not affect respiration, BP or BP response to epinephrine in cats; slightly potentiated acetylcholine contraction of ileum; at 0.1 and 0.2 Gm /Kg. in cat heart-lung preparation it induces bradycardia and reduces heart minute volume more susceptible to phenobarbital depression. Tests, 6 tables, 4 kymograms; 7 Western, 8 Czech & 1 Hungarian references.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618030005-8

CZECHOSLOVAKIA / General Problems of Pathology: Tumors.
Metabolism.

Abs Jour : Ref Zhur - Biol., No. 10, 1958, No. 46835

Author : Svec, Frantisek; Hlavayova, Helena.

Inst : Not given

Title : The Tissue Iron in the Course of Adenocarcinoma BS of the Rat.

Orig Pub : Ceskosl. onkol., 1956, 3, No. 1, 48-55

Abstract : After transplantation of sarcoma 180, the development of anemia in mice does not depend upon iron deficiency in the organism since the content of tissue iron increases and iron absorption is not disrupted. The development of an adenocarcinoma BS graft is accompanied by a severe anemia and by an increase of the Fe content in the organism and in the organs (especially in the liver, in the lungs,

Card 1/2

CZECHOSLOVAKIA / General Problems of Pathology. Tumors.
Metabolism.

U-5

Abs Jour : Ref Zhur - Biol., No. 10, 1958, No. 46835

Abstract : kidneys, testes, and muscles) in rats. During the stage of cachexia the amount of Fe entering the tumor is higher than the total content of Fe in the internal organs. The increase in the amount of functional Fe in the tumor and its accumulation in the organs takes place at the expense of Hb. The development of anemia is considered to be a result of toxic functional disturbances.

Card 2/2

HORANSKY, V.; MERKA, J.; HLAVCO, J.; SOLTES, L.

Chronic generalized tuberculous lymphadenitis (Leitner) in a
10-year-old girl. Cesk.pediat.16 no.3:245-248 Mr '61.

1. Detske odd. OUNZ v Lipt.Mikulasi, prednosta MUDr. V.Horansky.
(TUBERCULOSIS LYMPH NODE in inf & child)

HORANSKY, V.; SOLTES, L.; THOLT, R.; HLAVCO, J.; MERKA, J.

Staphylococcal empyema as a complication of morbilli. Cesk. pediat.
18 no.1:23-25 Ja '63.

1. Detske oddelenie OUNZ v Liptovskom Mikulasi, prednosta MUDr.
V. Horansky Infekcne oddelenie OUNZ v Liptovskom Mikulasi, prednosta
MUDr. R. Tholt.

(MEASLES)

(STAPHYLOCOCCAL INFECTIONS RESPIRATORY)

(EMPYEMA)

CLASSIFICATION		PROCESSING AND PROPERTIES INDEX	
<p>PATENT AFFAIRS OF CHEMICAL INDUSTRY. Hretislav Ilavica Chem. Obzor 22, 101-4(1947).-- Domestic patent affairs, under the nationalization system as well as international influences are explained. Jan Michal</p>		<p>13</p>	
<p>ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>		<p>U.S. PATENT OFFICE</p>	
<p>SERIAL NUMBER</p>		<p>ISSUE DATE</p>	
<p>1000000000</p>		<p>1948</p>	

HLAVICA, B.

CZECH

Chem & Educ

Hanc, O., Hummel, V., and Hlavica, B.: Chemická literatura, její dokumentace a použití. Prague: Nakladatelství CSAV. 1964. 422 pp. Kčs. 75. Reviewed in *Chem. Listy* 49, 1099(1955). *CH (2)*

Hanc, O., Hummel, V., and Hlavica, B.: Chemical Literature, its Documentation and Use. Prague: Publishing House CSAV. 1954. 422 pp. Kčs. 75. Reviewed in *Chem. Listy* 49, 1099(1955). *PM*

L 23926-66

AIC NR: AT5027856

SOURCE CODE: CZ/2503/65/000/011/0135/0166

AUTHOR: Klir, Jiri; Hlavicka, Jan

ORG: Research Institute of Mathematical Machines, Prague

TITLE: Logical design of sequential asynchronous switching circuits

SOURCE: Ceskoslovenska akademie ved. Vyzkumny ustav matematickych stroju. Stroje na zpracovani informaci, no. 11, 1965, 135-166

TOPIC TAGS: switching circuit, internal code, linear graph, memory element

ABSTRACT: This paper contains a methodical approach to the logical design of sequential asynchronous switching circuits. All necessary steps in the design are described, but the main attention is concentrated on the assignment of an internal code. Logical features of memory elements are also discussed, and some practical results are contained in the paper. The behavior of a sequential asynchronous switching circuit may be represented by a linear graph. Two interpretations of the linear graph, namely a state diagram and a flow table, are used for the design. The procedure of the assignment of an internal code begins with an internal state diagram, all points of which are mutually different in respect to the corresponding states of memory elements. In order to prevent a race of memory elements, it is prescribed that each line of any internal state diagram always represents a change of only one memory element. The number of lines belonging to the shortest path between two points

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L 23926-66

ACC NR: AT5027856

u and v of an internal of an internal state diagram defines the element c_{uv} of the matrix of changes, from which several matrices of distances of the internal code sought may be derived. The question of realizability of a matrix of distances is studied, and two ways of designing an internal code are introduced: a linear-programming approach and marti-comparison method. Some bounds for the number of memory elements are also contained in the paper. The complete design of sequential asynchronous switching circuits is illustrated by several examples. Orig. art. has: 12 figures, 21 tables, and 16 formulas. [Author's abstract] [KS]

SUB CODE: 09/

SUBM DATE: 18Jan64/

ORIG REF: 004/
OTH REF: 017/

SOV REF: 005/

Card 2/2 BK

HLAVICKA, Josef

Improvement of the educational work of the Revolutionary Trade-Union Movement. Prace mzda 12 no.1:1-4 Ja '64.

1. Tajemnik Ustredni rady odboru.

HLAVICKOVA, Z.; CHODERA, J.; PAVLANSKY, R.

Return of muscular function in chronic poliomyelitis following adjustment of statics. Acta chir. orthop. traum. Cech. 32 no.4: 348-352 Ag '65.

1. Oddelení fyzikální léčby a rehabilitace (vedoucí MUDr. A. Rydvalova), výzkumné protetické pracoviště Spofa (vedoucí MUDr. J. Chodera) a Klinická základna pro ortopedii Ústavu dětského lékařství (vedoucí doc. dr. R. Pavlansky) v nemocnici v Praze 8 na Bulovce.

CZECHOSLAVIA/Chemical Technology. Chemical
Products and Their Applications.
Water Treatment. Sewage.

H-5

Abs Jour : Ref Zhur-Khimiya, No 7, 1959, 23804

Author : Berka, J., Hadek, J., Hlavikova, Yo.,
Jelinek, V., Novak, Z.

Inst : -

Title : Investigation of Operation of the Quick
Acting Sand Filters.

Orig Pub : Voda, 1956, 35, No 12, 382-387

Abstract : The investigation was conducted on a semi-
commercial scale. Filters (F) had areas of
1 x 1 m and 0.1 x 0.1 m and were equipped
with devices for the removal of water samp-
les and for the pressure measurements at

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CZECHOSLOVAKIA/Chemical Technology. Chemical
Products and Their Applications.
Water Treatment. Sewage.

H-5

Abs Jour : Ref Zhur-Khimiya, No 7, 1959, 23804

varying depths. The coagulation of water was attained with the use of 1 percent $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ solution, introduced in doses of 2.4 mg/l. It was shown that under conditions of adequate mixing of water with reagents prior to filtration, the reagent dosage may be reduced by 60-70 percent. Sediments are retained on F equally well regardless of the impurities characteristics.
-- S. Yavorovskaya

Card : 2/2

FRASIL, Jan; HLAVINKA, Frantisek

Plummer-Vinson syndrome (Kelly-Patterson syndrome). Cesk. otolar. 8
no.1:8-14 Feb 59.

1. Pos. nemocnice Olomouc a ORL oddeleni OUNZ Prerov. J. P., Posadkova
nemocnice, Olomouc.

(DEGLUTITION DISORDERS.

Plummer-Vinson synd. (Cz))

DOLEZAL, Bohuslav, CSc.: HLAVINKA, Jiri, inz.

New trends in slaughtering methods and slaughter house equipment.
Prum potravin 16 no.1:8-11 Ja '65.

1. Research Institute of Meat, Brno. Submitted October 2, 1964.

SVOBODA, M., inz.; GILLAR, J., promovany biolog; SALPLACHTA, J.; HLAVKA,
C. M., inz.; STELCLOVA, D.; MARVAN, P., RNDr.

Last stage purification of dairy waste waters by biologic
filters. Vodni hosp 14 no.6:219-222 '64.

1. Institute of Dairy Research Brno (for all except Marvan).
2. Research Institute of Water Resources Management, Brno (for
Marvan).

Transformer

S.A. H-H/CH, U.

sect. B

621.314.3.044
1964. Increasing the strength of the insulation of
the input turns of a transformer winding. B. Holten,
J. M. A. AND A. Veronaa. Elektrotech. Obs., 50,
1-4 (No. 1-2, 1959) in Czech.

Investigation of the voltage distribution in coil
windings with uniform and non-uniform insulation
thickness in the case of a voltage surge. It was found
that the sudden change in coil inductance due to non-
uniform thickness of the insulation adversely affects
the electric stress conditions and that if a shield ring
is used it is preferable to use insulation of uniform
thickness. The experimental winding used in the
tests and the results obtained are described. S. Chern

HLAVKA, J.

"Superconductivity," p. 182.
(Elektrotechnický Obzor, Vol.42, No.4, Apr. 1953, Praha.)

SO: Monthly List of East European Accessions, Vol.2, No.9, Library of Congress, September
1953, Uncl.

HLAVKA, J.; BASTA, J.

"Jan Hlavka's Stridave proudy (Alternating Currents); a book review."

Elektrotechnicky Obzor. Praha, Czechoslovakia. Vol. 48, no. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclass

PHASE I BOOK EXPLOITATION

CZECH/4845

Hlavka, Jan, Doctor, Engineer, Professor, Doctor of Technical Sciences

Přechodné jevy v elektrických obvodech (Transients in Electric Circuits)
Prague, Státní nakladatelství technické literatury, 1960. 185 p. 1,200
copies printed.

Reviewer: Bedřich Heller, Doctor, Engineer, Doctor of Technical Sciences,
Corresponding Member of the Czechoslovak Academy of Sciences, State Prize
Winner; Tech. Ed.: Marie Králová; Chief Ed.: František Kašpar, Doctor,
Engineer; Resp. Ed.: Ladislav Ženíšek, Engineer.

PURPOSE: The book is intended for people working in research and development
institutions in the field of electrical engineering and also for students
in schools of higher education.

COVERAGE: This is a theoretical monograph on transients in electric circuits
containing linear and nonlinear components. The book outlines mathematical

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Transients in Electric Circuits

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solutions of transients, properties of electric-circuit components during transient processes, and gives considerable attention to the solution of random processes. The author thanks Doctor B. Heller, Engineer, for reviewing the manuscript and for his many valuable remarks. There are 45 references: 13 Czech, 1 Slovak, 8 Soviet, 8 English, 1 French, and 14 German.

TABLE OF CONTENTS:

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2. Basic concepts and problems	10
3. Classification of transients	12
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26010
Z/017/60/049/003/002/004
E192/E382

9,2572

AUTHOR: Hlávka, Jan, Professor Engineer, Doctor of
Technical Sciences

TITLE: Parametric Oscillations in a Damped Oscillatory
Circuit

PERIODICAL: Elektrotechnický obzor, 1960, Vol. 49, No. 3,
pp. 124 - 129

TEXT: The conditions of appearance of paramagnetic
resonances in a simple oscillatory circuit are analysed under
the assumption that the oscillations are "rectangular" in
shape. The above implies that during a half-period the value
of the relevant parameter is constant and the equation of the
system can easily be solved. The system considered is shown
in Fig. 1. During the interval from zero to $T/2$ (and during
all the odd half-periods) the damping of this circuit is β_1 ,
its resonance frequency is ω_{01} , while during the interval
 $T/2$ to T (and during all the even half-periods) the damping
is β_2 and the resonance frequency is ω_{02} ; T is the
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Parametric Oscillations

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period of the parametric oscillations. It is therefore necessary to solve the following equations:

$$x_1'' + 2\beta_1 x_1' + \omega_{o1}^2 x_1 = 0 \quad (1)$$

$$x_2'' + 2\beta_2 x_2' + \omega_{o2}^2 x_2 = 0$$

in such a way that the solutions $x_1(t)$ and $x_2(t)$ coincide

at points $t = T/2$ and $t = T$. In Eqs. (1), $\beta = R/2L$ and $\omega_o = 1/\sqrt{LC}$. The general solutions of Eqs. (1) are in

the form:

$$\left. \begin{aligned} x_1 &= e^{-\beta_1 t} (A_1 \cos \omega_1 t + B_1 \sin \omega_1 t) \\ x_2 &= e^{-\beta_2 t} (A_2 \cos \omega_2 t + B_2 \sin \omega_2 t) \end{aligned} \right\} \quad (2)$$

where

$$\omega_1 = \sqrt{\omega_{o1}^2 - \beta_1^2}$$

$$\omega_2 = \sqrt{\omega_{o2}^2 - \beta_2^2}$$

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Parametric Oscillations

The condition that the solution be periodic is that values should be the same at $t = 0$ and at T ; apart from the above, at $t = T/2$ the function $x_1(T/2)$ should "merge" continuously with $x_2(T/2)$. From these conditions it is

possible to calculate the constants A_1, A_2, B_1 and B_2 .

In general, the condition for the appearance of the oscillations can be formulated by stating that $x_2(T) \neq x_1(0)$ but can be greater or smaller, depending on whether the oscillations increase or are attenuated. These conditions can be stated as:

$$x_1\left(\frac{T}{2}\right) = x_2\left(\frac{T}{2}\right)$$

$$x'_1\left(\frac{T}{2}\right) = x'_2\left(\frac{T}{2}\right)$$

(3) .

$$x_2(T) = a x_1(0)$$

$$x'_2(T) = a x'_1(0)$$

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Parametric Oscillations

By considering the determinant of Eqs. (2) it is shown that the boundary of the stability of the parametric oscillations (i.e. the boundary of the so-called parametric resonance) is given by:

$$\cos \omega_1 \frac{T}{2} \cos \omega_2 \frac{T}{2} - \frac{\omega_1^2 + \omega_2^2 + 4\lambda^2}{2\omega_1\omega_2} \sin \omega_1 \frac{T}{2} \sin \omega_2 \frac{T}{2} = \quad (5)$$

$$= \cosh \bar{\beta} T$$

which is true for $\bar{\beta} \geq 0$. In the above equations,

$2\lambda = \beta_2 - \beta_1$, and $2\bar{\beta} = \beta_2 + \beta_1$. From Eq. (5), it is

possible to determine the dependence of the boundary of the parametric resonance on the characteristics of the circuit and the frequency and magnitude of the parametric oscillations. In practice, the most important parameters influencing the parametric resonance are the damping of the circuit and the changes of a given parameter. If the capacitor of the system

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Parametric Oscillations

is modulated in accordance with

$$C = C_0(1+M) \quad \text{for } 0 < t < \frac{T}{2}$$

$$C = C_0(1-M) \quad \text{for } \frac{T}{2} < t < T$$

where M is the amplitude of the parametric oscillations,
the relative value $\nu_0 = \omega_0/\Omega = \omega_0 T/2\pi$ of the resonance
frequency of the circuit is given by:

$$\nu_n = n\sqrt{1 \pm M}$$

$$n = 1, 2, 3, \dots$$

(7) .

The above is valid for the case when the damping of the
circuit is neglected. On the other hand, when the damping
is taken into account, the relative resonance frequency is

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Parametric Oscillations

defined by:

$$\nu_o = \omega \sqrt{1 \pm M} \sqrt{(1 \pm \chi)^2 + \frac{b^2}{\omega^2}} \quad (10)$$

where $b = \beta/\Omega$ and $\chi = \epsilon/n\omega$, where ϵ can be obtained from the solution of Eq. (5). In the case of a circuit with a dynamic resistance which varies between $-R$ and $+R$ (with $\beta = 0$), the relative frequency is given by:

$$\nu_o = \omega \sqrt{1 + \frac{b^2}{\omega^2}} \quad (13) .$$

For the same case but for finite damping, the following is true:

$$\nu_o = \omega \sqrt{(1 \pm \chi)^2 + \frac{b^2}{\omega^2} (1 \pm M)^2} \quad (16) .$$

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Parametric Oscillations

For the case of a dynamic inductance modulated as

$L = L_0(1 \pm M)$, the relative resonance frequency is expressed by:

$$\gamma_0 = \sqrt{(1 \pm \chi)^2 (1 \pm M) + \frac{b^2}{m^2} \frac{1}{(1 \pm M)}} \quad (17)$$

From the above investigations, it is concluded that:

- 1) there always exist the so-called regions of parametric resonance in an oscillatory circuit with parametric modulation; these regions lie in the vicinity of those resonance frequencies of the circuit which are a multiple of the frequency of the parametric oscillations;
- 2) the resonance regions are widened as the amplitude of the parametric oscillations is increased;
- 3) the resonance regions are narrowed as the damping of the circuit is increased;
- 4) the boundary curves determined in this work are, to some extent, applicable to the parametric oscillations of other shapes (for example - sinusoidal).

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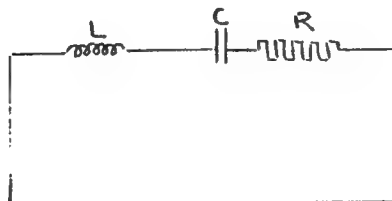
Parametric Oscillations

There are 5 figures and 5 references: 1 Czech and 4 non-Czech.
The two English-language references quoted are:
Ref. 4 - McLachlan, N. - Chinese reprint, 1950;
Ref. 5 - Coulthard, W. - " reprint, 1950.

ASSOCIATION: ČSAV

SUBMITTED: October 13, 1959

Fig. 1:



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S/194/62/000/002/064/098
D290/D301

AUTHOR: Hlávka, Jan

TITLE: Solving the wave equation by Fourier's method

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,
no. 2, 1962, 23, abstract 2Zh154 (Acta techn. (CSR),
1961, 6, no. 3, 242-250)

TEXT: The author studied uniform lines, whose elements were arbitrary combinations of resistance, capacitance, and inductance. A voltage $u_0(t)$ is applied at one end of the line. The voltage at any point on the line $u(x,t)$ is found as a function of time. The general Fourier solution does not always have physical meaning. In particular, if a signal

$$u_0(t) = \delta_0(t) = \frac{1}{2} + \frac{1}{\pi} \int_0^{\infty} \frac{\sin \omega t}{\omega} d\omega$$

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Solving the wave equation ...

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is fed into an ideal low-frequency filter, then

$$u(x, t) = \frac{1}{2} + \frac{1}{\pi} \int_0^{\omega_0} \frac{\sin \omega(t - x/v)}{\omega} d\omega$$

in which ω_0 is the cut-off frequency of the filter. For $x = 0$ and $t = 0$, $u(0,0) \neq 0$; this is inconsistent with a finite value v for the velocity of propagation. Other examples are given. It is shown that the cause of physically inadmissible results lies in the method itself and not in the selection of idealized problems. The finite velocity of propagation can be taken into account by using a function $\delta_0(t - x/v)$; this leads to results that have physical meaning. This substitution is shown to be valid. The author gives an approximate calculation of the integral that occurs in the ex-

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Solving the wave equation ...

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pression $u(x,t)$ if this substitution is made. [~Abstracter's note:
Complete translation.]

✓

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32780

S/194/62/000/005/131/157
D271/D308

9.3230

AUTHOR: Hlávka, J.

TITLE: On the Fourier solution of the wave equation

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
no. 5, 1962, abstract 5-7-40 t (Acta Techn. (Czechoslovakia))

TEXT: The solution of the wave equation by the Fourier method is analyzed. The Fourier transform theory is used in the analysis. Expressions are derived which characterize the waveform propagated in the line. Let a voltage, variable with time according to a given law act at the input of a uniform line the elements of which are formed by a combination of resistances, inductances and capacitances. Voltage at an arbitrary point on the line is to be found. Mathematically, the problem is described by the partial differential equation:

$$D_{x,t}(u) = 0$$

and by given initial and boundary conditions:

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On the Fourier solution of the ...

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$$u(x, D) = 0$$

$$u(D, t) = u_0(t).$$

The solution of this equation by the Fourier method is of the form: \checkmark

$$u_\omega = \sin(\omega t - kx).$$

Complete solution of the line equation is obtained in the integral form:

$$u(x, t) = \int_0^\infty A(\omega) \sin(\omega t - kx) d\omega.$$

When unit voltage is applied

$$u(x, t) = \frac{1}{2} + \frac{1}{\pi} \int_0^\infty \frac{\sin(\omega t - kx)}{\omega} d\omega.$$

The last expression, although correct from the formal point of view, is not realizable physically because it represents voltage which exists before the input voltage was applied. This antinomy is eliminated
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On the Fourier solution of the ...

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nated by the introduction of o-function defined by

$$u(x, t) = \frac{2}{\pi} \int_0^{\infty} \delta_0(t - t') \frac{\sin(t - t')}{\omega} d\omega.$$

In the point $x = 0$, i.e. when $t' = 0$

$$d_0(t) = \delta_0(t) = \frac{2}{\pi} \int_0^{\infty} \delta_0(t) \frac{\sin \omega t}{\omega} d\omega$$

t' is here regarded as a function of frequency. Introducing a new variable

$$\tau = t - \frac{x}{v_m}$$

the wave form can be investigated without complicated integration; here v_m is the maximum propagation velocity of partial waves. Of great importance here is the function

$$\zeta(\omega) = \frac{1}{v} - \frac{1}{v_m},$$

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On the Fourier solution of the ...

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where v is the propagation velocity of the partial wave. The method which has been developed is, by way of an example, applied to the study of the front wave form propagated on a line, the equivalent circuit of which, is similar to a m -derived low-pass filter. For this line

$$v = \sqrt{1 - \omega^2}, \quad v_m = v_m = v_o = 1$$

and

$$\varphi(\omega) = \frac{1}{v} = \frac{1}{v_m} = \frac{1}{\sqrt{1 - \omega^2}} - 1.$$

The wave front corresponds to low values of τ . For large values of τ

$$u(x, t) = \frac{2}{\pi} \text{Si}(\Omega) \delta_0(\tau)$$

where

$$\Omega = \int_0^\tau \omega_1 d\tau.$$

1 reference. (Academy of Sciences of Czechoslovakia). [Abstractor's note: Complete translation].

Card 4/4

HLAVKA, Jan, inz. dr., DrSc.

Function analysis of the thermistor gauge for liquid and gas
velocity flow measurement. K1 tech cas 14 no.9:521-535 '63.

1. Ustav pro elektrotechniku, Ceskoslovenska akademie ved,
Praha 1, Vavclavské náměstí 55.

HLAVKA, K.

Academician Radim Kettner; a biographic note. p. 210.
(Sbornik, Vol. 61, no. 3, 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

HLAVKA, K.

Seventy years of Brigadier General Ubald Kolarik; a biographic note. p. 211.
(Sbornik, Vol. 61, no. 3, 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

HLAVKA, Karel

Third Regional Geological Conference at the Silesian Institute
of the Czechoslovak Academy of Sciences. Cas min geol 3 no.4:
410-411 0 '63.

HLAVKA, V., MUDr.; JIRSA, J., MUDr.

Glaucoma screening in 3 health districts of the regional Institute of National Health in Kolin. Cesk. zdrav. 13 no.3:122-126 Mr '65

1. Namestek reditel pro lecebne preventivni peci Obvodniho ustavu narodniho zdravi v Koline (for Hlavka). 2. Vedouci ocnih oddeleni Obvodniho ustavu narodniho zdravi v Koline.(for Jirsa).

SVOBODA, Miloslav, inz.; SALPLACHTA, Jaromir; HLAVKA, G. Miroslav, inz.;
STELCOVA, Darja

Experience with the single-stage fermenting purification of dairy
waste water. Prum potravin 14 no.4:193-197 Ap '63.

1. Vyzkumny ustav mlekarensky, Praha, pracoviste Brno.

SAIDOVA, M. MUDr. PHMR., reditelka OUNZ v Koline; HLAVKA, V., MUDr.

Annual report and work organization at a health center. Cesk.
zdravot. 7 no.7:386-389 Aug 59.

1. Vedouci zdravotnického useku odvetvového odboru rady ONV Kolin.
Zastupce reditele OUNZ pro prev. lec. peci.
(PUBLIC HEALTH ADMINISTRATION)

HLAVKA, V.

A case of glioma of the 3d ventricle in a 4-month-old infant. Neurop-
sijatrija 9 no.4:325-328 '61.

1. Iz Zavoda za opcu patologiju i patolosku anatomiju Medicinskog
fakulteta u Zagrebu (v. d. predstoinika doc. dr A. Zimolo)

(GLIOMA in inf & child)
(BRAIN NEOPLASMS in inf & child)
(CEREBRAL VENTRICLES neopl)

HLAVKA, V., MUDr.

Time spent by the health community physician in office practice
and on visiting service. Cesk. zdrav. 12 no.2:53-59 F'64

1. Namestek reditele pro lecebne preventivni peci, OUNZ Kolin.

*

MARDESIC, Dusko, dr.; HIAVKA, Vladimir, dr.; CIGIT, Stjepko

Idiopathic pulmonary hemosiderosis. Liječn. vjesn. 87 no.2:
165-174 F '65.

1. Iz Dječjeg odjela i Prosekture Medicinskog centra u Sisku.

YUGOSLAVIA

TRBANK, Aladar, Dr; ~~HAJTA, Vladimir, Dr~~; CIGIT, Stjepko, Dr:
Institute of Pathology and Patho-Anatomy, Medical Faculty, University of Zagreb; Department of Pediatrics, Medical Center Sisak (Zaved za opstu patologiju i patolosku anatomiju Medicinsko fakulteta u Zagrebu; Djecji odjel Medicinskog centra Sisak).

"Acute Haemoperitoneum Due to Rupture of a Hepatic Tumor"

Zagreb, Radovi Medicinskog Fakulteta u Zagrebu, Vol 13, No 2, 1965, pp 167-173

Abstract /Authors' English summary/: Three cases of acute spontaneous haemoperitoneum with fatal termination are reported. The first case was an 18-month-old child with a hepatoblastoma of the liver, the second case was rupture of a primary carcinoma of the liver in a 56-year-old man, and the third case was a 34-year-old woman with rupture of a hepatic metastasis of primary solid carcinoma of the breast. The cause of the ruptures remained unexplained. The authors emphasize the significance of rupture of a primary or metastatic tumor of the liver in the differential diagnosis of an acute haemoperitoneum, especially since there have been cases described where intervention saved the patient's life. Pictures. 1 Yugoslav and 11 Western references. Manuscript received 12 Oct 1965.

1/1

HLAVKA, Z.

"Collected Works on the Machine Industry". P. 779 (STROJIRENSTVI, Vol. 3, No. 10, October 1953, Praha, Czechoslovakia).

SO: Monthly List of East European Accessions, LC, Vol. 3, No. 5, May 1954, Unclassified

CZECHOSLOVAKIA

KRUTA, V., HLAVKOVA, J; Physiological Institute, Medical Faculty
J.E.Purkyne University (Fysiologicky Ustav Lek. Fak. University
J.E.Purkyne), Brno.

"The Period of Heart Contraction in Some Kinds of Mammals."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 116

Abstract: The heart beat varies in mammals, from 10 to 500 per minute. Variations persist even in vitro. The longest and shortest periods of contraction at a given temperature are characteristic of a given animal, but differ much less than the frequency of the heart beat. Values found at 20 and 35°C for guinea pig, cat and dog differed very little, only rat myocardium showed substantially lower values. 2 Czech references. Submitted at "16 Days of Physiology" at Kosice, 28 Sep 65.

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- 157 -

HLAVKOVA, M.

Outings. p.138.
(Železnice, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) IC. Vol. 6, No. 9, Sept. 1957. Uncl.

HLAVKOVA, M.

"Thermit welding. p.247

ZELEZNICAR, (Ministertvo dopravy) Praha, Czechoslovakia No. 11, Nov. 1958

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 6, June 1959

Uncl.

CA

H-AVINGARA, J.

117

Antitubercular activity of 2-amino-4-hydroxy-5-pyrimidin-2-carboxylic acid, pyrimidine analog of *p*-aminosalicylic acid. P. Šimr, J. Hlavnička, J. Šcher, and A. Šimek (Central Chem. Inst., Prague, Czech.). *Chem. Listy* 45, 422-3(1951). (Guanidine carbonate (1 g) in ac

KOH (2.1 g. in 10 ml.) was treated with 4-OH-ClCO₂Et₂, crystals of 4-(2-amino-4-hydroxy-5-pyrimidin-2-carboxylate were sepd. and recrystd. from water with a small amt. of EtOH or from AcOH, yield 4.3 g. (62%), m. 290° (decomp.). The free acid was obtained from its ester by sapon. with ethanolic KOH and acidification with AcOH in 76% yield, m. 250° (decomp.). Its Na salt crystallizes with 2 H₂O. Tuberculostatic activity of this acid is half that of *p*-aminosalicylic acid. M. Hudlický

HLAVNICKA, J.

6
1-4E2
2 May

4334. Identification of antioxidants in rubber. J. HLAVNICKA and E. TUMACKOVA. *Plast. v. Kaut.* 1967, 4, 124-3. The general principles, and the disadvantages, of the existing methods are briefly surveyed. The new method described involves the use of acetone extraction followed by alumina column chromatography in benzene and washing in 95% benzene-5% ethanol. The product is dissolved in 1 ml hot acetone and paper-chromatographed with petroleum/acetone or ammoniacal ethanol, the product being identified by the R_f values and by the aid of diazo-*p*-nitraniline. The colours given by this substance with the antioxidants tested are listed. Diazo sulphuric acid is given as an alternative to diazo-*p*-nitraniline, and some R_f values and illustrations are given. There are 15 references.

Rm amf

S/C81/62/000/010/C81/065
B166/B144

11.6.70
AUTHORS:

Wlavnička, Jiří, Nevařil, Josef

TITLE:

Contribution to the question of evaluating modified oils
from the point of view of their action on oil-resistant
rubber

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 10, 1962, 657, abstract
10P406 (Kaučuk a plast. hmoty, no. 8, 1961, 254-255)

TEXT: The swelling of oil-resistant rubbers in transformer oil containing
chlorinated paraffin additives has been studied. The oil resistance of
rubber increases with the content of acrylonitrile. Chlorinated paraffins
and lowering of the aniline point increase the aggressiveness of oils.
With an identical aniline point an oil containing chlorinated paraffins
is more aggressive than one without them. [Abstracter's note: Complete
translation.]

Card 1/1

HLAVOCKOVA, EVA.

CZECHOSLOVAKIA/Soil Cultivation. Organic Fertilizers.

J-4

Abs Jour: Ref Zhur-Biologiya, No 1, 1958, 1282.

Author : Hlavockova, Eva

Inst : Czechoslovak Academy of Agriculture.

Title : Preparation and Application of Bacterial Fertilizers in Agriculture.

Orig Pub: Sbor. Ceskosl. akad. zemed. ved. Rostl. vyroba, 1956, 29, No 9-10, 909-936 (Czech with Russian, English, and German resumes)

Abstract: The material presented was prepared for a conference of agronomist-microbiologists. The experimental data given characterize the effectiveness of inoculating leguminous crops with various strains of nodular bacteria. Foreseen for 1960 is the bacterization with nitrazon and azotobakter

Card : 1/2

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CZECHOSLOVAKIA/Soil Cultivation. Organic Fertilizers

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618030005-

Abs Jour: Ref Zhur-Biologiya, No 1, 1958, 1282.

of 250,000 hectares and 50,000 hectares respectively. Construction is commencing on the first factory of bacterial preparates. Its productivity will be in the order of from 120-150,000 hectare portions. Proposals for stepping up production and increasing the application of bacterial fertilizers are given, as well as for intensification of the necessary research. Bibliography of 116 titles.

Card : 2/2

-18-

HOSKOVA, A.; HLAVON, J.

Subcapsular hematoma of the liver in newborn infants. Cesk. pediat.
17 no.3:254-257 Mr '62.

1. I detska klinika University J. Ev. Purkyně v Brně, prednosta prof.
dr. Zdeněk Brunecký.

(LIVER wds & inj) (HEMATOMA in inf & child)
(BIRTH INJURY)

HOSKOVA, A.; HLAVON, J.

On the problem of transitory biliary obstruction in young infants.
Cesk. pediat. 17 no.12:1071-1075 D '62.

1. I detska klinika lekarske fakulty University J. Ev. Purkyne v Brne,
prednosta prof. dr. Z. Brunecky.
(HEPATITIS) (INFANT NEWBORN DISEASES) (BILIARY TRACT)

HLAVON, Jiri; VEDROVA, Drahomila

Effect of glucuronic acid on hyperbilirubinemia in newborn infants
and on the elimination of bile pigments in the feces. Cas. Lek. Cesk.
101 no.11:327-331 16 Mr '62.

1. I detska klinika lek. University J. Ev. Purkyne v Brne, prednosta
prof. MUDr. Zd. Brunecky.

(GLUCURONATES pharmacol) (BILIRUBIN blood)
(FECES chemistry)

HLAVON, J.

A rare form of congenital cellular insufficiency -- cyclic
neutropenia. Cesk. pediat. 19 no.2:152-156 F'64.

1. I.detska klinika lekarske fakulty UJEP v Brne; prednosta:
prof.dr. Z.Brunecky.

*

BERGMANN, K.; HLAVOVA, A.; HORAK, O.

Therapy of hypertension in out-patients with DH-ergotoxins. Cas. lek. cesk. 44 no.10:237-240 4 Mar 55.

1. Ustav pro choroby obehu krevniho, Praha; red. prof. Dr. Kl. Weber
(ERGOT ALCALOIDS, ther. use
dihydrogenated deriv. in hypertension in out-patients)
(HYPERTENSION, therapy
dihydrogenated ergot alkaloids in out-patients)

KAJIC, F.; FEJFAROVA, M.; HLAVOVA, A.; with the technical assistance of
JOZIFKOVA, B.; VOJTOVA, M.

Experimental pulmonary cedema produced by alloxan. III. Haemodynamic
and respiratory changes in vagotomised dogs. Cor Vasa 4 no.1:42-52
'62.

1. Institute for Cardiovascular Research, Prague.
 (PULMONARY EDEMA exper) (ALLOXAN toxicol)
 (VAGOTOMY exper) (RESPIRATION physiol)
 (BLOOD CIRCULATION physiol)

ZAJIC, F.; FEJFAR, Z.; FEJFAROVA, M.; HLAVOVA, A.

Investigation of manifestations of cardiac insufficiency. Rev. czech.
med. 8 no.3:152-158 '62.

1. Institute of Cardiovascular Research, Prague; Director: Academician
K. Weber.

(HEART FAILURE, CONGESTIVE) (PULMONARY EDEMA)

POVAK, E.; BLAVOVA, V. Techn. spoluprace: HRADLINOVA, J.; SKALOVA, Z. PELCOVA, V.

Experiences with balneological therapy of foreign patients
in Karlovy Vary. Fysiat. vestn. 43 no.3:138-143 Je'65.

1. Ceskoslovenske lznne, Lazenska sanatoria Imperial, Karlovy
Vary (reditel: MUDr. J. Hanycz).

HLAVSA, E.

"Utilization of waste from the glycerin distillation for the manufacture of noncorrosive efficient brine." p. 267

PRUMYSL POTRAVIN. Praha, Czechoslovakia, Vol. 9, No. 5, May, 1958

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September, 1959
Unclas

and kill, entering; BAVBA, 1964.

A new method of prerelinement of fresh rape oil. From potravín
15 no.8:194 Ag '64.

1. Severočeské tukové závody Hranice, Interprase, Ustí nad L. bon
(for Prikryl). 2. Research Institute of Fat Industry, Ustí nad
Labem (for Hlasek).

HLAVSA, Frantisek

Diaphragm molding of cores. Odevrennvi 13 n. 11.12.1977 An 105.

1. Moravskoslezské elektrotechnické závody National Enterprise,
Zabreh, Department of Metallurgy Development.

HLAVSA, J.

On the problem of conditioned reflex formation and association. Aktiv.
nerv. sup. 4 no.1:45-50 '62.

1. Pedagogický ústav J. A. Komenského, Praha.

(REFLEX CONDITIONED)

HLAVSA, J.

The principle of back signalisztion. Activ. nerv. sup. 6 no.1:
70-71 '64

*

HLAVKA, V.

"Activity around the acrylates."

JEMNA MECHANIKA A OPTIKA, Praha, Czechoslovakia, Vol. 4, No. 6, June 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

HLAVSA, M., dr.

"Small analog computers" by Anatoliy Konstatinovic Ganulic
[Ganulich, Apatoliy Konstantinovich]. Reviewed by M.Hlavsa.
Jemna mech opt 9 no. 9:296 S '64.

"Optical electron tubes" by [inz. CSc.] Vlad. Jares, [inz.CSc.]
Mir.Jedlicka. Reviewed by M.Hlavsa. Ibid.:296

HLAVSA, M. dr.

Application of calculating machines in Yugoslavia. Jemna
mech opt 9 no.11:2 of cover,3 of cover N '64.

HLAVSA, M., dr.

"Projection of small slides" by Jan Schlemmer. Reviewed by
M. Hlavsa. Jemna mech opt 5 no.2:75 F '60.

HLAVSA, M , dr.

"Infrared spectroscopy in chemical analysis" by Ivo Kossler. Reviewed
by M. Hlavsa. Jemna mech opt 5 no.10:328 0 '60.

HLAVSA, M., dr.

"Principles of manual metal working" by A. Vesely.
Reviewed by M. Hlavsa. Jemna mech opt 6 no.2:66
F '61.

HIAVSA, M., dr.

"Handbook of elementary mathematics" by M.J. Vygodskij.
Revised by M. Hlavsa. Jemna mech opt 6 no.2:67 F '61.

HLAVSA, M., dr.

"Vacuum measurement" by Ales Blaha. Reviewed by M. Hlavsa.
Jemna mech opt 6 no.3:93 Mr '61.

HLAVSA, M., dr.

"Television aerial amplifiers and distributors; joint aerials"
by Milan Cesky. Reviewed by M. Hlavsa. Jemna mechopt 6 no.9:294
S '61.

HLAVSA, M., dr.

"Electronic measurement instruments and the measurement" by Stanislav Haderka. Reviewed by M. Hlavsa. Jemna mech opt 6 no.9:294 S '61.

HLAVSA, M., dr.

"Measuring and testing of transistors" by Jindrich Cermak.
Reviewed by M.Hlavsa. Jemna mech opt 7 no.6:192 Je '62.

HLAVSA, M., dr.

"Collection of papers on vacuum electrotechnics". Reviewed by M.
Hlavsa. Jemna mech opt 7 no.8:267 Ag '62.

HLAVSA, M., dr.

" Reproduction photography, apparatus, equipment, techniques" by
Jaroslav Salda. Reviewed by M. Hlavsa. Sdel tech 10 no.2:80 F '62.

HLAVSA, M., dr.

Dangers threatening the British electronic industry and the
way to prevent them. Sdel tech 10 no.7:264 JI '62.

HLAVSA, Milos, dr.

Electronics used successfully by economists. Sdel tech 10 no.8:306-307
Ag '62.

Hlavsa, M., dr.

"Luminescence; physical aspects and technical application" by
Karel Patek. Reviewed by M. Hlavsa. Jem. mech. opt. 8, no.1:36
Ja '63.

HLAVSA, M., dr.

"Measuring instruments and measurement" by [inž.] V. Vysoky, [inž.]
J. Hasek. Reviewed by M. Hlavsa. Jemna mech opt 8 no.3:100 Mr '63.

HLAVSA, M., dr

"Diotaphones in practice" by L.Vodnarek. Reviewed by M. Hlavsa.
Jemna mech opt 8 no.3:100 Mr '63.

HLAVSA, M., dr.

Prague exhibition of the products of VEB Zeiss Jena. Jemna mech opt
8 no.4:108 Ap '63.

HLAVSA, M., dr.

"Electromechanical recording apparatus" by Karel Kabes.
Reviewed by M. Hlavsa. Jemna mech opt 8 no.5:167 My '63.

HLAVSA, M., dr.

"Descriptive geometry" by Miroslav Mensik. Pt. 1. Reviewed by
M. Hlavsa. Jemna mech opt 8 no.5:167 My '63.

HLAVSA, M., dr.

"Operation and maintenance of control and regulation equipment"
by [inz.] J. Petr. Reviewed by M. Hlavsa. Jemna mech opt 8
no.6:3 of cover Je '63.

HLAVSA, M., dr.

Ten years of the Czechoslovak Academy of Sciences activity
brought results interesting for telecommunication engineering.
Sdel tech 11 no.2:42 F '63.

HLAVSA, M., dr.

Vienna Fair 1963 shows new trends in telecommunication engineering.
Sdel tech ll no.4:142 Ap '63.

HLAVSA, M., dr.

Thematic plan of optica and precision mechanics for 1965-1966.
Jemna. mech opt 10 no.3:104 Mr '65.

HLAWKA, EDMUND

Hlawka, Edmund. Inhomogene Linearformen in algebraischen Zahlkörpern. Akad. Wiss. Wien, S.-B. IIa. 155, 63-73 (1947).

The author extends the method of Siegel [see H. Davenport, Acta Arith. 2, 262-265 (1937)], relating to the product of n nonhomogeneous linear forms, to the case when the homogeneous parts of the linear forms are those arising from an "Ordnung" in an algebraic number-field, and its conjugates. The formulation of the main theorem is not altogether clear to the reviewer, and is incorrect as regards the reference to the determinant of the forms.

H. Davenport (London).

Source: Mathematical Reviews,

Vol.

No.